

Title (en)

AN ANNULAR COMBUSTION CHAMBER WALL ARRANGEMENT

Title (de)

RINGFÖRMIGE BRENNKAMMERWANDANORDNUNG

Title (fr)

AGENCEMENT DE PAROIS DE CHAMBRE DE COMBUSTION ANNULAIRE

Publication

EP 2975323 A1 20160120 (EN)

Application

EP 15172537 A 20150617

Priority

GB 201412460 A 20140714

Abstract (en)

An annular combustion chamber wall arrangement comprises an annular wall (46) and a plurality of tiles (48A) and each tile (48A) is secured to and is spaced from a further annular wall (46). The first surface (49) of each tile (48A) faces the annular wall (46) and the second surface (49B) of each tile (48A) faces away from the annular wall (46). Each tile (48A) has a plurality of pedestals (78) extending away from the first surface (49) towards the annular wall (46) and/or a plurality of effusion cooling apertures (82) extending through the tile (48A) from the first surface (49) to the second surface (49B). At least one of the tiles (48A) has the pedestals (78) and/or the effusion cooling apertures (82) arranged in a predetermined pattern (110) which provides the tile (48A) with a more uniform stiffness in all directions to reduce the possibility of cracking of the tile (48A). In one predetermined pattern (110) the pedestals (78') are arranged in a Fermat's (parabolic) spiral with the pedestals (78') arranged with Fibonacci number ordering.

IPC 8 full level

F23M 5/02 (2006.01); **F23R 3/00** (2006.01); **F23R 3/06** (2006.01)

CPC (source: EP US)

F23M 5/02 (2013.01 - EP US); **F23R 3/002** (2013.01 - EP US); **F23R 3/007** (2013.01 - US); **F23R 3/04** (2013.01 - US);
F23R 3/06 (2013.01 - EP US); **F23M 2700/0053** (2013.01 - EP US); **F23R 2900/03041** (2013.01 - EP US); **F23R 2900/03045** (2013.01 - EP US)

Citation (search report)

- [XYI] US 2005241316 A1 20051103 - NGUYEN LY D [US], et al
- [Y] US 6170266 B1 20010109 - PIDCOCK ANTHONY [GB], et al
- [Y] US 2001004835 A1 20010628 - ALKABIE HISHAM SALMAN [GB], et al
- [Y] US 2006117755 A1 20060608 - SPOONER MICHAEL P [GB], et al

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 2975323 A1 20160120; EP 2975323 B1 20190807; GB 201412460 D0 20140827; US 10563866 B2 20200218; US 2016010862 A1 20160114

DOCDB simple family (application)

EP 15172537 A 20150617; GB 201412460 A 20140714; US 201514743181 A 20150618